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## Research Report

## When God Sanctions Killing

## Effect of Scriptural Violence on Aggression

Brad J. Bushman,<sup>1,2</sup> Robert D. Ridge,<sup>3</sup> Enny Das,<sup>2</sup> Colin W. Key,<sup>3</sup> and Gregory L. Busath<sup>3</sup><sup>1</sup>*Institute for Social Research, University of Michigan;* <sup>2</sup>*Department of Communication Science, Vrije Universiteit, Amsterdam, The Netherlands;* and <sup>3</sup>*Department of Psychology, Brigham Young University*

**ABSTRACT**—*Violent people often claim that God sanctions their actions. In two studies, participants read a violent passage said to come from either the Bible or an ancient scroll. For half the participants, the passage said that God sanctioned the violence. Next, participants competed with an ostensible partner on a task in which the winner could blast the loser with loud noise through headphones (the aggression measure). Study 1 involved Brigham Young University students; 99% believed in God and in the Bible. Study 2 involved Vrije Universiteit–Amsterdam students; 50% believed in God, and 27% believed in the Bible. In Study 1, aggression increased when the passage was from the Bible or mentioned God. In Study 2, aggression increased when the passage mentioned God, especially among participants who believed in God and in the Bible. These results suggest that scriptural violence sanctioned by God can increase aggression, especially in believers.*

Do not think that I have come to bring peace upon the earth. I have come to bring not peace but the sword. (Matthew 10:34, New American Bible)

The LORD is a warrior, LORD is his name! (Exodus 15:3, New American Bible)

Soon shall We cast terror into the hearts of the Unbelievers, for that they joined companions with Allah, for which He had sent no authority: their abode will be the Fire: and evil is the home of the wrong-doers! (*The Glorious Qur'ān*, 2003, 3:151)

Religiously inspired aggression, like the attacks of Christian right-wing extremist Timothy McVeigh in Oklahoma, Jewish reactionary Baruch Goldstein in Israel, and fundamentalist Islamic leader Osama bin Laden in the United States and elsewhere, has produced renewed scholarly interest in why people

commit violence in the name of deity (e.g., Juergensmeyer, 2003). One possible reason is that they believe scriptural texts justify aggression. For example, each of the passages just quoted, in isolation and without context, could be interpreted as a justification for violence against unbelievers. Not only are there single injunctions promoting aggression against other individuals in these texts and others, but there are also lengthy depictions of violence against unbelievers in some religious texts.

Research in social psychology confirms that exposure to violent media increases aggression (e.g., Anderson & Bushman, 2002), especially when individuals identify with violent characters (Huesmann & Eron, 1986), and when the violence appears to be justified (i.e., the victims deserved their fate; Berkowitz, 1993). Research on media violence, however, has focused almost exclusively on violent television programs, films, and video games. Written depictions of violence have received far less attention. Yet if it is the case that a reliance on religious canon is part of the inspiration for violence meted out by religious extremists, an investigation of reactions to scriptural violence is warranted. This was the purpose of the present investigation.

On the basis of social psychological theories implicating identification and justification in increasing aggression, we hypothesized that exposure to a biblical description of violence would increase aggression more than a secular description of the same violence. We also predicted that aggression would be greater when the violence was sanctioned by God (high justification) than when it was not sanctioned by God (low justification). We tested these hypotheses using both religious (Study 1) and nonreligious (Study 2) participants. We expected the effects to be larger for participants who believed in God and in the Bible than for those who did not.

## METHOD

## Participants

## Study 1

The participants in Study 1 were 248 students (95 men, 153 women) from Brigham Young University (BYU) who received

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course credit in exchange for their voluntary participation. About 97% listed their religious affiliation as The Church of Jesus Christ of Latter-Day Saints, and 99% said they believed in God and in the Bible.

### Study 2

The participants in Study 2 were 242 Dutch students (110 men, 132 women) from the Vrije Universiteit (VU) in Amsterdam. They received €3 (about \$4) in exchange for their voluntary participation. About 40% listed no religious affiliation (religious affiliations listed were 18% Catholic, 11% Protestant, 12% Muslim, 8% Christian, 2% Hindu, 1% Jewish, and 8% other); 50% said they believed in God, and 27% said they believed in the Bible.

### Procedure

Participants were told that they would be participating in two separate studies, one on Middle Eastern literature, and one on the effect of negative stimulation on reaction time. After giving their informed consent, participants reported their religious affiliation, whether they believed in God (yes/no), and whether they believed in the Bible (yes/no). Next, they read a passage. Half were told that the passage was taken from the Book of Judges in the Old Testament (Chapters 19–21, New American Bible, the actual basis for the relatively obscure and unrecognized passage). The other half were told it was taken from a scroll discovered in ancient ruins near Wadi Al-Murabba'ah during a 1984 archaeological expedition headed by Professor William Deyer.

The story took place among the 12 tribes of Israel in the land of Canaan (what is today Israel). It began with a man and his concubine (wife of second rank), both from the Israelite tribe of Ephraim, traveling in the land of Benjamin (another Israelite tribe). The couple reached the city of Gibeah and searched for a place to stay. An old man offered to let the couple stay with him. While they were enjoying a meal together, a mob pounded on the old man's door and said, "Bring out your guest, that we may abuse him." The old man said no, but the mob took the woman, raped and beat her all night, and then left her dead body on the old man's doorstep in the morning. The man put his concubine's corpse on a donkey and went home. He called an assembly of Israelites to decide what action should be taken against the mob from Gibeah. The people from the other tribes of Israel were outraged by what the mob had done to the woman. For half the participants, the following two sentences were inserted:

The assembly fasted and prayed before the LORD and asked "What shall be done about the sins of our brothers in Benjamin?"; and the LORD answered them, saying that no such abomination could stand among his people. The LORD commanded Israel to take arms against their brothers and chasten them before the LORD.

Thus, half the participants read that God commanded a violent retaliation for the murder of the man's concubine.

These sentences were missing from the story for the other half of the participants.

The story continued, saying that the Israelites assembled an army to fight against the Benjamites in Gibeah. The casualties were heavy on both sides, with tens of thousands of soldiers killed. In the end, however, the Israelite army not only destroyed the city of Gibeah, but also destroyed several other Benjamite cities, killing everything they could get their hands on: men, women, children, and animals.

After reading the story, participants completed a competitive reaction time task (Taylor, 1967), presumably as part of a separate study. This task is a reliable and valid laboratory measure of aggression (e.g., Anderson & Bushman, 1997; Bernstein, Richardson, & Hammock, 1987; Giancola & Zeichner, 1995). Participants were told that they and their ostensible partners would have to press a button as fast as possible on each of 25 trials, and that whoever was slower would receive a blast of noise through a pair of headphones. In advance, participants set the level of noise their partners would receive. Noise levels ranged from 60 dB (*Level 1*) to 105 dB (*Level 10*, about the same volume as a smoke or fire alarm). A nonaggressive no-noise option (*Level 0*) was also provided. The "partners" set random noise levels throughout the task. Basically, within the ethical limits of the laboratory, participants controlled a weapon that they could use to blast their partners if they won the reaction time competition. Finally, participants were fully debriefed.

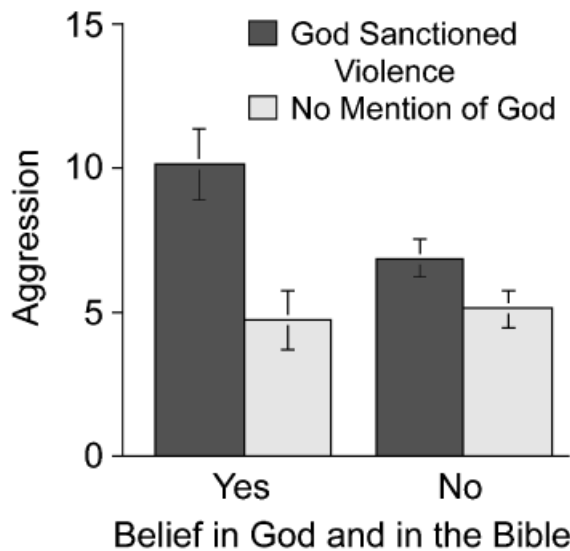
## RESULTS

### Study 1

The data from Study 1 were analyzed using a 2 (passage source: Bible vs. scroll)  $\times$  2 (God authorized violence: yes vs. no)  $\times$  2 (participants' gender) analysis of variance. Because we were interested in extreme acts of aggression, the dependent variable was the number of times participants chose the highest noise levels (i.e., 9 or 10) for their ostensible partners. Thus, aggression scores could range from 0 to 25, depending on the number of trials in which participants selected the highest noise levels. As expected, BYU students who were told that the passage was from the Bible were more aggressive than those who were told the passage was from an ancient scroll,  $M_s = 3.44$  and  $2.48$ ,  $SE_s = 0.53$  and  $0.26$ , respectively,  $F(1, 240) = 4.47$ ,  $p < .04$ ,  $p_{rep} > .892$ ,  $d = 0.30$ . Students who read a passage stating that God sanctioned the violence tended to be more aggressive than those who read a passage that did not mention God,  $M_s = 3.40$  and  $2.47$ ,  $SE_s = 0.43$  and  $0.31$ , respectively,  $F(1, 240) = 2.95$ ,  $p < .09$ ,  $p_{rep} > .828$ ,  $d = 0.23$ . Also, men were more aggressive than women,  $M_s = 4.12$  and  $2.16$ ,  $SE_s = 0.53$  and  $0.26$ , respectively,  $F(1, 240) = 13.25$ ,  $p < .0001$ ,  $p_{rep} > .996$ ,  $d = 0.48$ .

### Study 2

The data from Study 2 were analyzed using a 2 (passage source: Bible vs. scroll)  $\times$  2 (God authorized violence: yes vs. no)  $\times$  2



**Fig. 1.** Effect of belief in God and in the Bible on aggression levels after reading a violent passage in which either God sanctioned the violence or God was not mentioned. The measure of aggression was the number of trials (out of 25) on which participants chose to deliver the highest noise levels (i.e., 9 and 10) to their ostensible partners. Thus, aggression scores could range from 0 to 25. Capped vertical bars denote  $\pm 1$  SE.

(belief in God and in the Bible: yes vs. no)  $\times$  2 (participants' gender) analysis of variance. VU students who read a passage stating that God sanctioned the violence were more aggressive than those who read a passage that did not mention God,  $M_s = 8.70$  and  $4.92$ ,  $SE_s = 0.69$  and  $0.61$ , respectively,  $F(1, 225) = 16.81$ ,  $p < .001$ ,  $p_{rep} > .986$ ,  $d = 0.55$ . Participants who believed in God and in the Bible tended to be more aggressive than those who did not,  $M_s = 7.65$  and  $5.97$ ,  $SE_s = 0.80$  and  $0.46$ , respectively,  $F(1, 225) = 3.30$ ,  $p < .08$ ,  $p_{rep} > .840$ ,  $d = 0.24$ . These main effects, however, were qualified by the predicted interaction between these two factors,  $F(1, 225) = 3.99$ ,  $p < .05$ ,  $p_{rep} > .878$ . As Figure 1 shows, reading a violent passage in which God sanctioned the violence increased aggression in believers and even in nonbelievers,  $F(1, 225) = 12.35$ ,  $p < .001$ ,  $p_{rep} > .986$ ,  $d = 0.47$ , and  $F(1, 225) = 4.45$ ,  $p < .04$ ,  $p_{rep} > .892$ ,  $d = 0.28$ , respectively. However, the effect was much larger for believers than for nonbelievers.

There was also a nearly significant interaction between passage source and God sanctioning the violence,  $F(1, 225) = 3.81$ ,  $p < .06$ ,  $p_{rep} > .864$ . When the passage was from the Bible, participants were more aggressive when the passage mentioned God than when it did not,  $M_s = 9.77$  and  $4.20$ ,  $SE_s = 0.99$  and  $0.89$ , respectively,  $F(1, 225) = 17.47$ ,  $p < .001$ ,  $p_{rep} > .986$ ,  $d = 0.56$ . When the passage was from an ancient scroll, aggression levels were similar whether God sanctioned the violence or not,  $M_s = 7.63$  and  $5.65$ ,  $SE_s = 0.95$  and  $0.84$ , respectively,  $F(1, 225) = 2.42$ ,  $p < .13$ ,  $p_{rep} > .787$ ,  $d = 0.21$ . These effects were observed regardless of belief in God and the Bible; the interaction between passage source, God sanctioning the violence, and belief in God and the Bible was nonsignificant ( $F < 1$ ).

Other effects less central to the hypotheses were also found. As in Study 1, men were more aggressive than women,  $M_s = 8.23$  and  $5.40$ ,  $SE_s = 0.70$  and  $0.59$ , respectively,  $F(1, 225) = 9.46$ ,  $p < .003$ ,  $p_{rep} > .974$ ,  $d = 0.41$ . However, this main effect of gender was moderated by an interaction between gender and God sanctioning the violence,  $F(1, 225) = 5.47$ ,  $p < .03$ ,  $p_{rep} > .908$ . Men who read a passage stating that God sanctioned the violence were more aggressive than men who read a passage that did not mention God,  $M_s = 11.19$  and  $5.27$ ,  $SE_s = 1.08$  and  $0.91$ , respectively,  $F(1, 225) = 17.72$ ,  $p < .001$ ,  $p_{rep} > .996$ ,  $d = 0.46$ . For women, aggression levels were similar whether God sanctioned the violence or not,  $M_s = 6.21$  and  $4.59$ ,  $SE_s = 0.85$  and  $0.83$ , respectively,  $F(1, 225) = 1.87$ ,  $p < .18$ ,  $p_{rep} > .741$ ,  $d = 0.18$ .

## DISCUSSION

We found compelling evidence that exposure to a scriptural depiction of violence or to violence authorized by deity can cause readers to behave more aggressively. In Study 1 (religious sample), aggressive responses were greater when a violent depiction was attributed to a scriptural source than when it was attributed to an ancient scroll and were also greater when the violence was said to be sanctioned by God than when God was not mentioned. In Study 2 (nonreligious sample), this latter finding was replicated among the believers, and to a lesser extent even among the nonbelievers. In addition, the findings of Study 2 show that the justification of violence by God increases aggressive behavior when the words can be attributed to a scriptural source, but not necessarily when the passage is from a secular source.

Assuming that a religious, or believing, audience identifies with scriptural characters more than does a nonreligious or unbelieving audience, our results further confirm previous research showing that exposure to violent media causes people to behave more aggressively if they identify with the violent characters than if they do not (e.g., Huesmann & Eron, 1986). Furthermore, to the extent that our manipulation of God either sanctioning or not sanctioning the violence represents a valid operationalization of justification, we have further evidence that violence perceived as justified produces more aggression than does unjustified violence (Berkowitz, 1993). This work extends these findings from the visual arts to the literary arts.

This work also supports theories proposed by scholars of religious terrorism who hypothesize that exposure to violent scriptures may induce extremists to engage in aggressive actions (e.g., Juergensmeyer, 2003). It is notable that we obtained evidence supporting this hypothesis in samples of university students who were, in our estimation, not typical of the terrorists who blow up civilians. Even among our participants who were not religiously devout, exposure to God-sanctioned violence increased subsequent aggression. That the effect was found in such a sample may attest to the insidious power of exposure to literary scriptural violence.

Does this ultimately mean that one should avoid reading religious canon for fear that the violent episodes contained therein will cause one to become more aggressive, or that individuals who read the scriptures will become aggressive? Not necessarily. Violent stories that teach moral lessons or that are balanced with descriptions of victims' suffering or the aggressor's remorse can teach important lessons and have legitimate artistic merit (e.g., Stossel, 1997). Moreover, Nepstad (2004) argued that "religion has historically played a significant role in curbing violence, constraining aggression, and promoting reconciliation and understanding between groups" (p. 297), presumably because the overriding message of the scriptures is one of peace and love. Taking a single violent episode out of its overall context (as we did here) can produce a significant increase in aggression. To the extent that religious extremists engage in prolonged, selective reading of the scriptures, focusing on violent retribution toward unbelievers instead of the overall message of acceptance and understanding, one might expect to see increased brutality. Such an outcome is certainly consistent with our results: People who believe that God sanctions violence are more likely than others to behave aggressively themselves.

## REFERENCES

- Anderson, C.A., & Bushman, B.J. (1997). External validity of "trivial" experiments: The case of laboratory aggression. *General Psychology Review*, 1, 19–41.
- Anderson, C.A., & Bushman, B.J. (2002). Media violence and societal violence. *Science*, 295, 2377–2378.
- Berkowitz, L. (1993). *Aggression: Its causes, consequences, and control*. New York: McGraw-Hill.
- Bernstein, S., Richardson, D., & Hammock, G. (1987). Convergent and discriminant validity of the Taylor and Buss measures of physical aggression. *Aggressive Behavior*, 13, 15–24.
- Giancola, P.R., & Zeichner, A. (1995). Construct validity of a competitive reaction-time aggression paradigm. *Aggressive Behavior*, 21, 199–204.
- The Glorious Qur'ân* (A.Y. Ali, Trans.). (2003). Baltimore: Islamic Bookstore.com.
- Huesmann, L.R., & Eron, L. (1986). *Television and the aggressive child: A cross-national comparison*. Hillsdale, NJ: Erlbaum.
- Juergensmeyer, M. (2003). *Terror in the mind of God: The global rise of religious violence* (3rd ed.). Berkeley: University of California Press.
- Nepstad, S.E. (2004). Religion, violence, and peacemaking. *Journal for the Scientific Study of Religion*, 43, 297–301.
- Stossel, S. (1997, May). "The man who counts the killings." *The Atlantic Monthly*, 279, 86–104.
- Taylor, S.P. (1967). Aggressive behavior and physiological arousal as a function of provocation and the tendency to inhibit aggression. *Journal of Personality*, 35, 297–310.

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